



**UNITED STATES DEPARTMENT OF COMMERCE**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/869,589    06/05/97    STROLLE    C    SAR-12082

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LM02/0824

EXAMINER

BURD, K

ART UNIT

PAPER NUMBER

2734

DATE MAILED:

08/24/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/869,589

Applicant(s)

Strolle

Examiner

Kevin Burd

Group Art Unit

2734



☒ Responsive to communication(s) filed on Aug 2, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-16 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 11 is/are allowed.

☒ Claim(s) 1, 9, 10, 12, 15, and 16 is/are rejected.

☒ Claim(s) 2-8, 13, and 14 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 9-10, 12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen (U.S. 4,891,716).

Regarding claim 1 and 12, Andersen discloses an apparatus and method for autocalibration of a data signal channel comprising:

an equalizer for adjusting the amplitudes of the bandedges of a broadband signal in response to control signals (column 4 lines 1-23); and

a signal processor for generating control signals in response to the bandedge signal (column 4 and 8 lines 1-23 and 44-49 respectively).

Andersen does not expressly state a bandedge filter is used for extracting a bandedge signal from the broad band signal. Andersen does, however, disclose means for extracting the values of the bandedges (figure 5 item 58 and column 8 lines 18-62). It would be obvious for one of ordinary skill in the art at the time of the invention to use

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a bandedge filter instead of the extraction means as disclosed by Andersen since the same function is carried out.

Regarding claim 9 and 15, Andersen further discloses an apparatus and method for autocalibration of a data signal channel as stated above in paragraph 2.

However, it is not stated that the pre-equalizer attenuates a particular bandedge of the broadband signal in response to the control signal.

It is well known in the art, that an equalizer will have a transmitted data stream inputted and utilizing updated equalization coefficients provided from a control signal source compensate for any lost data. This compensation will require attenuation and amplification to occur if the need arises.

Regarding claim 10 and 16, Andersen discloses the equalizer amplifying the bandedge of the broadband signal in response to the control signal (column 4 and 8 lines 1-23 and 44-49 respectively).

***Allowable Subject Matter***

3. Claims 2-8 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claim 11 is allowed.

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5. The following is a statement of reasons for the indication of allowable subject matter:

None of the cited references fails to teach the further arrangement of the band edge signal processor, the apparatus for equalizing the amplitudes of the bandedges of the broadband signal and the method for equalizing the amplitude of the bandedges of the broadband signal as recited in the claims 2, 3, 4, 5, 13 and 14 respectively.

Claim 11 is allowable because none of the cited references teach the arrangement of pre-equalizer, bandedge filter, a first Hilbert filter, a second Hilbert filter, a first magnitude processor, a second magnitude processor, a subtractor and a loop filter in order to form the apparatus for equalizing the amplitudes of the bandedges of a broadband signal as recited in claim 11.

***Conclusion***

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

(703) 308-6743, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Burd, whose telephone number is (703) 308-7034.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4900.

*Kevin M. Burd*

Kevin M. Burd  
PATENT EXAMINER  
August 12, 1999

*[Signature]*  
TEMESGHEN CHEBRETSINAE  
PRIMARY EXAMINER